

## Project Design Phase-I

### PROBLEM SOLUTION FIT TEMPLATE

Date	19 September 2022
Team ID	PNT2022TMID36233
Project Name	Smart Lender-Applicant Credibility Prediction For Loan Approval
Maximum Marks	4 Marks

#### PROBLEM SOLUTION FIT TEMPLATE:

**Project Title:** Smart Lender - Applicant Credibility Prediction for Loan Approval

**Project Design Phase-I - Solution Fit Template**

**Team ID:** PNT2022TMID36233

<div style="background-color: #f0f0f0; padding: 2px; font-weight: bold; text-align: center;">Define CS, fit into CC</div> <div style="background-color: #fff9e6; padding: 5px; margin-top: 5px;"> <b>1. CUSTOMER SEGMENT(S)</b> <span style="float: right; background-color: #ffcc00; padding: 2px 5px; font-weight: bold;">CS</span>  <small>Who is your customer? E.g. problem segments of B.C. can study</small>  <b>A Student who want to study can apply Educational loan.</b>  <b>A business man who want to increase their production can apply business loan.</b>  <b>A man who want to build a new home can apply home loan.</b> </div>	<div style="background-color: #fff9e6; padding: 5px; margin-top: 5px;"> <b>6. CUSTOMER CONSTRAINTS</b> <span style="float: right; background-color: #ffcc00; padding: 2px 5px; font-weight: bold;">CC</span>  <small>What constraints prevent your customers from taking action or limit their choices? of all devices</small>  <b>Financial constraints for quality of investment.</b>  <b>Increase Income status.</b>  <b>People want extra duration to pay their debt.</b> </div>	<div style="background-color: #fff9e6; padding: 5px; margin-top: 5px;"> <b>5. AVAILABLE SOLUTIONS</b> <span style="float: right; background-color: #ffcc00; padding: 2px 5px; font-weight: bold;">AS</span>  <small>Why? (cost, time, availability, etc.)</small>  <b>People can have jewels or properties before they apply for a loan , they can eligible for getting loan.</b> </div> <div style="background-color: #f0f0f0; padding: 2px; font-weight: bold; text-align: center;">Explore AS, differentiate</div>
<div style="background-color: #fff9e6; padding: 5px; margin-top: 5px;"> <b>2. JOBS-TO-BE-DONE / PROBLEMS</b> <span style="float: right; background-color: #ffcc00; padding: 2px 5px; font-weight: bold;">J&amp;P</span>  <small>When jobs-to-be-done (or problems) do you address for your customer?</small>  <b>People want to buy a loan based on their situation.</b>  <b>People want to build their financial status.</b>  <b>People want to alleviate their burdens.</b> </div> <div style="background-color: #f0f0f0; padding: 2px; font-weight: bold; text-align: center;">Focus on J&amp;P, map into BE, understand RC</div>	<div style="background-color: #fff9e6; padding: 5px; margin-top: 5px;"> <b>9. PROBLEM ROOT CAUSE</b> <span style="float: right; background-color: #ffcc00; padding: 2px 5px; font-weight: bold;">RC</span>  <b>People have low financial status level.</b>  <b>People can loss profit in their own business.</b>  <b>People can have low family situation like child education, women marriage, build home.</b> </div>	<div style="background-color: #fff9e6; padding: 5px; margin-top: 5px;"> <b>7. BEHAVIOUR</b> <span style="float: right; background-color: #ffcc00; padding: 2px 5px; font-weight: bold;">BE</span>  <small>What does your customer do to address the problem and get the job done?</small>  <b>Those who buy the loan for education and study , then the other consumer can decide to buy the products and behave as same as the customer.</b>   <b>Business man can understand their audience and create more enticing product or services.</b> </div> <div style="background-color: #f0f0f0; padding: 2px; font-weight: bold; text-align: center;">Focus on J&amp;P, map into BE, understand RC</div>
<div style="background-color: #fff9e6; padding: 5px; margin-top: 5px;"> <b>3. TRIGGERS</b> <span style="float: right; background-color: #ffcc00; padding: 2px 5px; font-weight: bold;">TR</span>  <small>What triggers cause your customer to act?</small>  <b>People want to make their life luxurious so they can apply the loan and buy what they want.</b>  <b>Tracks a consumer's credit behaviour across multiple products</b> </div> <div style="background-color: #fff9e6; padding: 5px; margin-top: 5px;"> <b>4. EMOTIONS: BEFORE / AFTER</b> <span style="float: right; background-color: #ffcc00; padding: 2px 5px; font-weight: bold;">EM</span>  <small>How do customers feel when they face a problem or a job and afterwards? i.e. lost, etc.</small>  <b>People can face rejection in the first stage of getting loan.</b>  <b>Borrowers can become distressed due to various reasons, including business failure or loss of income or an inability to understand the terms of a loan.</b> </div> <div style="background-color: #f0f0f0; padding: 2px; font-weight: bold; text-align: center;">Identify strong TR &amp; EM</div>	<div style="background-color: #fff9e6; padding: 5px; margin-top: 5px;"> <b>10. YOUR SOLUTION</b> <span style="float: right; background-color: #ffcc00; padding: 2px 5px; font-weight: bold;">SL</span>  <b>The prediction of credit defaulters is one of the difficult tasks for any bank.</b>  <b>But by forecasting the loan defaulters, the banks definitely may reduce their loss by reducing their non-profit assets, so that recovery of approved loans can take place without any loss and it can play as the contributing parameter of the bank statement.</b>  <b>This makes the study of this loan approval prediction important.</b>  <b>Machine Learning techniques are very crucial and useful in the prediction of these types of data.</b> </div>	<div style="background-color: #fff9e6; padding: 5px; margin-top: 5px;"> <b>8. CHANNELS of BEHAVIOUR</b> <span style="float: right; background-color: #ffcc00; padding: 2px 5px; font-weight: bold;">CH</span>  <b>Online: The credit profiles of your network of closest 'friends' can be an important factor in determining your own credit score too.</b>  <b>Offline: word of mouth based on customers.</b> </div> <div style="background-color: #f0f0f0; padding: 2px; font-weight: bold; text-align: center;">Identify strong TR &amp; EM</div>